

ABSTRACT

A tensionless leveller for levelling a metal strip and having an entry and an exit includes $n+1$ motorized rolls each having a constant radius R . The leveller also includes a lower superposed cassette supporting at least $n/2$ of the rolls and an upper superposed cassette supporting at least $n/2$ of the rolls not supported by the lower superposed cassette. The rolls are offset with respect to one another and are placed alternately above and below a path of the strip. An axis of each of the rolls of the lower cassette is separated from an axis of an immediately successive roll of the upper cassette by a center-to-center spacing E_k , in which: for k from 2 to 4, $R/E_k = R/E_1$; for k from $n-3$ to n , $R/E_k = R/E_n$ and $R/E_c < R/E_1$; and for k from 5 to $n-1$, $R/E_n \leq R/E_k \leq R/E_1$, and $R/E_k \geq R/E_{k+1}$.